

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 May 2001 (17.05.2001)

PCT

(10) International Publication Number
WO 01/35165 A1

(51) International Patent Classification⁷: G03C 5/00,
G06F 17/10, G21C 5/00

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(21) International Application Number: PCT/US00/41988

(22) International Filing Date:
7 November 2000 (07.11.2000)

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(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/164,093 7 November 1999 (07.11.1999) US
09/708,193 7 November 2000 (07.11.2000) US

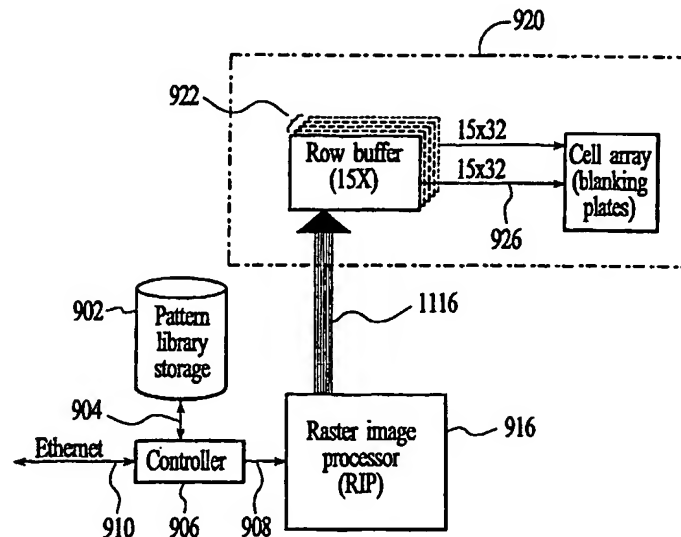
(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW.

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(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

[Continued on next page]

(54) Title: DATA PATH DESIGN FOR MULTIPLE ELECTRON BEAM LITHOGRAPHY SYSTEM



(57) Abstract: A data path design for a multiple electron beam lithography system is disclosed herein. This data path design addresses the requirement for supplying a large number of parallel pattern data streams, one to each of the multiple writing beams in the lithography system. The data path can be described as a collection of embedded processors custom designed ASICs, SDRAMs, glue logic, and software. A block diagram of this implementation includes an Ethernet link (910), which is used by a controller (906) to bring in pattern data from an outside source and the Pattern Library Storage (PLS) (902), which communicates to the controller (906) through the high speed data bus (904).

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IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(15) Information about Correction:

see PCT Gazette No. 38/2001 of 20 September 2001, Section II

Published:

— *with international search report*

(48) Date of publication of this corrected version:

20 September 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.